

CLAIM AMENDMENTS

In the claims:

Please cancel claims 1 – 8.

Please add new claims 9 and 10:

Claim 1 (Canceled).

Claim 2 (Canceled).

Claim 3 (Canceled).

Claim 4 (Canceled).

Claim 5 (Canceled).

Claim 6 (Canceled).

Claim 7 (Canceled).

Claim 8 (Canceled).

Claim 9 (newly added). A surgical screw for the connection of human bone structures comprising:

An expandable element and a spindle,

said expandable element prior to expansion having a substantially cylindrical configuration comprising a finely threaded external surface along the length of said cylindrical configuration, said threads being substantially continuous such that said expandable element may be inserted into a cylindrical cavity in a bone by imparting a turning motion upon said expandable element whereby said threads will frictionally and nondestructively engage the walls of said cavity to position said expandable element within said cavity,

said expandable element further comprising a distal portion and a proximal portion, said proximal portion terminating at a flat end, said flat end having a slotted recess suitable for accepting a tool having a blade for turning said expandable element during emplacement,

said distal portion comprising four or more longitudinally extending expandable members, said expandable members prior to expansion being positioned in close proximity to one another to form a substantially cylindrical surface having same diameter as said proximal portion and substantially maintaining the continuity of said threads comprising said finely threaded external surface, said expandable members having longitudinally extending slots between them, said slots extending from the distal end of said distal portion to a point near the midpoint of said expandable element, said distal end being truncated to form a smooth conical frustum,

said expandable element further comprising a threaded axial bore extending longitudinally through said expandable element, said threaded axial bore having a constant diameter from said proximal end to a point near the midpoint of said axial bore, said axial bore forming a funnel portion of continuously decreasing diameter beginning near said midpoint of said axial bore and having a minimum diameter at said distal end of said axial bore,

said spindle comprising a central shaft and a head [0019], said shaft being threaded along its length and smoothly engaging said threaded axial bore within said proximal portion upon imparting a turning motion to said spindle, said shaft thereafter increasingly extending into said funnel portion of said axial bore upon the continued turning of said spindle within said axial bore, said shaft continuously forcing said expandable members to spread apart from one another as said shaft is continuously extended within said funnel portion,

said spreading movement of said expandable members continuously increasing the effective diameter of said distal portion of said expandable element as said shaft is further extended into said funnel portion, thereby causing said expandable element to be securely anchored within said cavity without destructively engaging said bone forming said cavity,

said head of said spindle having a diameter that is smaller than the diameter of said proximal end, said head having a recessed cavity forming a regular polygon at the center for receiving a turning implement.

Claim 10 (newly added). A surgical screw according to Claim 9, wherein said regular polygon is a hexagon.